

Abstract of the Invention

In an aspect of the invention, a fluoropolymer dispersion, preferably a PTFE dispersion, is provided that comprises fluoropolymer particles having an average particle size of 10 to 400nm dispersed in water whereby the dispersion has an amount of solids between 35 and 70% by weight. The dispersion is free of fluorinated surfactant having a molecular weight of less than 1000g/mol (hereinafter called low molecular weight fluorinated surfactant) or contains the low molecular weight fluorinated surfactant in an amount of not more than 0.05% by weight based on the total weight solids of the dispersion. The dispersion further comprises a non-ionic non-fluorinated surfactant or mixture of non-ionic non-fluorinated surfactants and one or more non-fluorinated anionic surfactants. Through the use of a non-fluorinated anionic surfactant, a dispersion is obtained that has a low viscosity at room temperature (20°C). The dispersion is further free of aromatic group containing non-ionic surfactants and is accordingly environmentally more friendly and can yield coatings that are less susceptible of discoloration. The amount and nature of the non-ionic non-fluorinated surfactant or mixture of non-ionic non-fluorinated surfactants is selected such that the Viscosity Transition Temperature (VTT) (measured as set forth in the examples) of the fluoropolymer dispersion is at least 26, preferably at least 28°C. In a further aspect of the invention, a method is provided to obtain the aforementioned dispersion.